



## Recall Information Bulletin

**No:** C1006610 **Issued:** 2/13/2014

**Revised:** 3/27/2014

**NHTSA No:** 14V-046

**Transport Canada No:** 2014-037

**Re:** DUONIC ATF Contamination

**Group:** 22 **Models:** FE/FG

**SUBJECT:**

Safety Recall C1006610 – DUONIC ATF Contamination

**MODELS:**

FEC52, FEC72, FEC92, FGB72

**VEHICLES INVOLVED:**

Certain 2012, 2013 and 2014 model year FEC52, FEC72, FEC92 and FGB72 trucks produced from February 3, 2011 through August 21, 2013, transmission serial numbers prior to ZG81964.

A list of vehicles your Dealership has sold that require this Recall can be found on the Dealer's "Open Campaigns" list supplied by MFTA via Fusonet. Some individual vehicles described above may not need the Recall. Always check the "VIN Inquiry" tab under "Service" or "Warranty" on Fusonet to verify that the VIN requires this Safety Recall.

**Important note: It is a violation of Federal law for a dealer to deliver a new or used motor vehicle covered by this Recall Information Bulletin, under a sale or lease, until the Safety Recall has been completed.**

**OWNER NOTIFICATION:**

Owners of affected vehicles will be notified by mail.

**CONDITION:**

Mitsubishi Fuso Truck of America, Inc. has decided that a defect which relates to motor vehicle safety exists in the automatic transmission fluid. On affected vehicles, the transmission assembly may not have been cleaned sufficiently during the manufacturing process, allowing debris to contaminate the ATF. This debris could become lodged in the clutch control solenoid valve, causing abnormal noise when shifting, flaring between gears when shifting, or inability to shift. In the worst case, the transmission could become completely inoperative or the engine could stall, causing a crash without warning.

**MODIFICATION:**

Transmission assemblies will be flushed and refilled with new ATF.

**RECALL CLAIM SUBMITTAL:**

Claim labor via Fusonet using the Recall Claim Entry screen. Enter all requested information, including the Campaign Number. The system will apply the labor allowance and parts pricing adjustment shown.

Campaign Reimbursement					
Campaign Number	Models	Allowances		Labor Description	Part Number
C1006610	FEC52 FEC72 FEC92 FGB72	Labor Time	1.8 hours	Flush DUONIC transmission fluid.	LT124B01 LT124C01 (same as 4032610)
		Parts Pricing	US\$76.01		

**REPAIR PROCEDURE:**

1. Park the vehicle on a flat, level surface, turn off the engine and chock the wheels.

**CAUTION!**

**Do not remove the wheel chocks until all modification work has been completed.**

2. Perform the Campaign using the attached modification procedure.

**Note: If the transmission is experiencing any shifting problems, refer to Service Information Bulletin 14-003, and repair any transmission-related issues BEFORE completing this campaign.**

## Modification Procedure

1. **Drain the ATF (If flushing is performed during a DUONIC transmission replacement, skip this step and proceed directly to Step 4.)**

Remove the drain plug, and remove approximately 2.0 liters (2.1 quarts) of ATF from the transmission. After draining the ATF, reinstall and tighten the drain plug, then remove the oil pan.

Drain plug tightening torque: 29 ft.lbs. (39 Nm)

**CAUTION !**

- ATF temperature is still hot just after stopping the engine.

- Before removing the drain plug, clean the inspection plug and oil pan to prevent contaminating the clutch housing.

Keep the work area clean to prevent contamination from entering the clutch housing.

- Do not use air tools to remove the oil pan.

2. **Remove and clean the oil pan (If flushing is performed during a DUONIC transmission replacement, skip this step and proceed directly to Step 4.)**

Remove ATF and contaminants from the oil pan using parts cleaner.



3. **Reinstall the oil pan (If flushing is performed during a DUONIC transmission replacement, skip this step and proceed directly to Step 4.)**

Wipe the ATF out of the oil pan, and install the oil pan temporarily. (Do not replace the oil pan gasket during this step!)

Oil pan bolt tightening torque: 7.5 ft.lbs. (10.2 Nm)

**CAUTION !**

- Do not use air tools to install the oil pan.

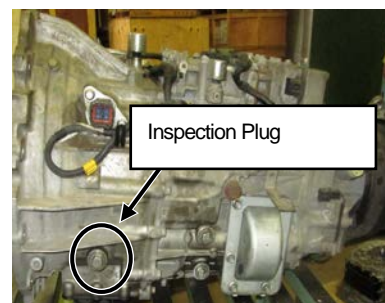
- Place a drain pan under the transmission in case a small amount of ATF leaks out during this step.

4. **Refill and circulate the ATF through the valve body and oil cooler**

(1) Refill the transmission through the inspection plug with approximately 2.0 liters ATF. (Use part # **LT124C01**)

**CAUTION!**

After refilling with ATF, install the inspection plug quickly to prevent contamination from entering the clutch housing.



### Circulate the ATF through the valve body and oil cooler

Start the Engine. (To circulate the ATF through the Valve body)

- Move the shift lever from N to D, D to R(D→N→R), R to D(R→N→D) at 10 second intervals with the parking brake and service brake applied (To circulate the ATF through the oil cooler lines) – **Repeat 4 times.**
- Perform a DUONIC initialization. (Refer to Service Information Bulletin 11-008 or Groups 22 and 22E of the Service Manual) – **Repeat 4 times.**
- Turn off the engine.

### CAUTION!

- If the shift position does not change from to D or N on the indicator (due to shifting failure), please perform the operation using the 'Oil cooler ON' actuator test using Fuso Diagnostics. (It will automatically switch off after 30 seconds.)
- It is not required to adjust ATF temperature before this procedure. (Any ATF temperature is acceptable)
- If the system appears to be “sucking air”, add additional ATF.

Diagnosis > Control unit

TCM - DUONIC Control unit (A28)

Version | Error codes | Actual values | **Actuations** | Adaptations

Selection

- 000 Shift Gear
- 001 Pressure line High
- 002 Pressure line Low
- 003 Oil cooler ON**
- 004 Oil cooler OFF
- 005 Internal clutch plate ON
- 006 External clutch plate ON
- 007 Deactivation of shift lock

003 Oil cooler ON

#### Requirement for actuation

Name	Actual value	Specified value
Gear engaged (CAN Instrument panel)	Fault: 53336/6058	
⚠ Engine speed (CAN)	0 1/min	≥ 400

#### Status of associated actual values

Name	Actual value	Specified value
Control valve Oil cooler	NOT ACTIVATED	
Oil temperature of transmission	0.0°C	

Continue ▶

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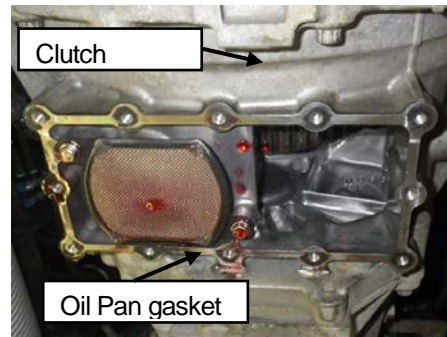
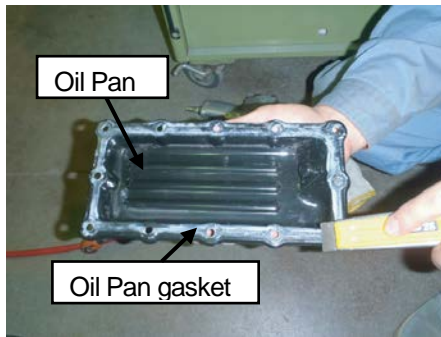
### 5. Drain the ATF and gear oil

### 6. Remove and clean the oil pan

Follow Step 2.

**7. Replace the oil pan gasket and reinstall the oil pan**

- Remove the remnants of the old oil pan gasket from the oil pan and clutch housing. Clean off any remaining ATF residue.
- Reinstall the oil pan with the new gasket in **LT124B01**. Oil pan bolt tightening torque: 7.5 ft.lbs. (10.2 Nm)



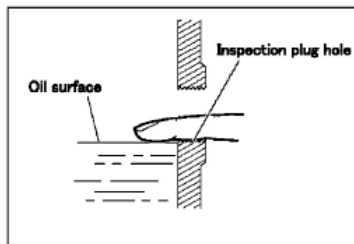
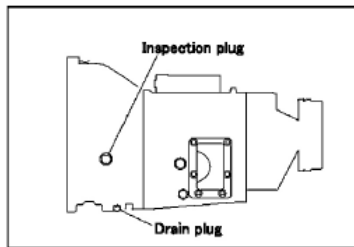
**CAUTION!**

- Do not use air tools to tighten the oil pan bolts.
- Ensure that no pieces of the old oil pan gasket are left in the clutch housing.
- Always use cloth rags to clean ATF residue. Do not use paper towels!
- Install the oil pan quickly after affixing the new oil pan gasket to ensure that no ATF leaks onto the gasket surface. Leaked ATF deteriorates the sealing ability of the gasket, which could cause future ATF leaks.

**8. Refill the clutch housing and gear box to the proper level** (Refer to Section 22 of the Canter Service Manual for clutch housing [LT124C01 ATF] and gear box [Mobil Delvac 1230/1630 SAE 30 or equivalent] fill procedures).

Check the ATF level using the following procedure:

- Start the engine and raise the transmission fluid temperature to approximately 120°F (50°C) [using Fuso Diagnostics to monitor the transmission fluid temperature].
- Perform the following procedure to fill the hydraulic circuit with ATF.



Fill the hydraulic circuit with automatic transmission fluid (ATF) as follows:

- Start the engine.
- While depressing the brake pedal, move the gearshift lever between the "R" and "D" positions, holding the lever in each position for three to five seconds. Repeat this operation three times, then place the gearshift lever firmly into the "P" position.
- Turn off the engine.

Remove the inspection plug and check the ATF level to determine if the fluid is filled to the bottom of the plug hole.

- When the inspection is complete, reinstall the inspection plug and gasket and tighten the plug to proper specifications.

**CAUTION** ⚠

- After filling the ATF reservoir, promptly reinstall the inspection plug to prevent dirt and dust from entering the clutch housing.

- Ensure that the parking brake remains fully applied before exiting the cab and check the fluid level **within 10 minutes** of performing the above steps to ensure that the ATF has not drained out of the hydraulic circuit.
- If ATF flows from the inspection plug hole, or if the ATF level is at the bottom of the hole, the level is correct.
- If the ATF level is lower than the bottom of the hole, correct the level.
- Reinstall the inspection plug and gasket and tighten to 60 ft.lbs. (81 Nm).

9. **Affix the ATF label to the transmission**

Clean the left side of the clutch housing near the ATF level plug and affix the ATF label.

**ATF SP III or equivalent**  
ATF level check must be completed hot.  
See service manual for instruction.

If there is currently a label affixed here, affix the new label on top of it.

If there is a character, please paste a new sticker on under the level plug.



Level plug

# SERVICE INFORMATION BULLETIN

Bulletin Number: 11-008    Models: FEC52, FEC72, FEC92, FGB72    Issue Date: October 2011    Page 1 of 2

**SUBJECT:**

DUONIC™ Transmission Initialization Procedure

**MODELS:**

FEC52, FEC72, FEC92, and FGB72

**DESCRIPTION:**

Initialization of the DUONIC™ system is the process by which the DUONIC™ electronic control unit memorizes the initial settings of the transmission. Initialization must be performed after any of the following have occurred.

- Service has been performed on the engine and/or transmission which may have altered or changed their characteristics.
- Automatic transmission fluid (ATF) has been replaced.
- Gear oil has been replaced.
- A body has been installed on the chassis.

Before beginning the initialization procedure, please ensure that:

- Transmission fluids have reached at least 120°F (50°C).
- ATF has been sufficiently circulated through the system by starting the engine and cycling the shift lever through the following positions, remaining in each position for approximately 3 to 5 seconds.  
“P” → “D” → “R” → “D” → “R” → “D” → “R” → “P”

To perform the initialization procedure, please follow the steps on the next page.



Please initial and route to the following personnel before filing.

Service Mgr.		Warranty Mgr.		Service Technicians - Initial in boxes below.									
Shop Foreman		Parts Mgr.											



# SERVICE INFORMATION BULLETIN

Bulletin Number: 11-008    Models: FEC52, FEC72, FEC92, FGB72    Issue Date: October 2011    Page 2 of 2

## **DUONIC™ TRANSMISSION INITIALIZATION PROCEDURE:**

1. Park the vehicle on a flat, level surface and chock the wheels to prevent movement of the vehicle.
2. Fully engage the parking brake.
3. Insert the key into the ignition switch and turn to the "ON" position (**DO NOT START!**)
4. Using your right foot, fully depress the accelerator to floor (100% throttle) and hold the pedal in this position (until Step 11).
5. With your left foot, fully depress the brake pedal and hold it in this position.
6. With your left hand, move the gearshift selector lever down from the "P" position through "R" to "N" and then left to the "D" position for 1 second.
7. Using your left hand, move the selector lever to the "A/M" position and hold in this position (until Step 10). The gear position indicator should display "N" in the multi-information display.
8. Using your right hand, release and fully engage the parking brake lever for 1 second.
9. Release and fully engage the parking brake a second time, then leave the parking brake fully engaged. The gear position indicator should display a flashing "1" in the multi-information display.
10. Release the selector lever and move it to the "P" position.
11. Release the accelerator pedal.
12. Start the engine and leave it running at an idle.
13. Release the brake pedal. The gear position indicator should display a flashing "2".
14. Allow the system to continue initialization and run through its entire cycle. The gear position indicator should display a flashing "2", then "3", "4", and "5" and the engine speed will increase automatically as initialization proceeds.  
**IMPORTANT!: Do not touch any controls until the cycle completes.**
15. When the gear position indicator displays a flashing "N", initialization is complete.
16. Turn the ignition key to the "OFF" position.

Please initial and route to the following personnel before filing.

Service Mgr.		Warranty Mgr.		Service Technicians - Initial in boxes below.								
Shop Foreman		Parts Mgr.										